illustrate the absorbing power of a stream of fluid, whether issuing from the open orifice of a reservoir, or flowing through rigid tubes. The effects of this power are seen in the position of the fluid contained in a vertical tube open at both ends, placed within the reservoir, and of which one end is brought within the influence of the effluent stream; and also, when one end of a bent tube is brought into the stream issuing from the open orifice of a reservoir, while the other end is immersed in a coloured fluid. The author accounts for the intermitting or pulsatory character of the jet issuing from an open horizontal pipe, having a small hole on the upper side, by the introduction of air, which, accumulating from time to time, forms a bubble, which when it has attained a certain size, occasions an obstruction to the free passage of the liquid, until the obstacle is overcome by increased pressure from behind, and the jet then resumes its former velocity. These changes occurring periodically, give rise to the appearance of pulsation which is observed in these circumstances.

May 23, 1844.

ROBERT BROWN, Esq., V.P., in the Chair.

1. "Meteorological Register kept at the Master Attendant's Office, Trincomalee, between the 1st of September, 1843, and the 29th of February, 1844." By Joseph Higgs, Master Attendant. Communicated by the Lords Commissioners of the Admiralty.

2. "On the supposed Properties of the Electric and Magnetic Fluids." By W. F. Stevenson, Esq., F.R.S.

The author is of opinion that electricity is a single undecomposable fluid, and that the distinction usually made into vitreous and resinous, or positive and negative electricities, is derived altogether from the direction of its motion and the circumstances under which it is presented; and, according as it is found on a conducting or non-conducting body, it is positive in the former case and negative in the latter. The quality of the electricity is, according to the author, modified by the form of the conducting body, which, when globular, opposes its escape; but, when pointed, facilitates its passage in a current. He considers the magnetic fluid as obeying the same law as the electric fluid, that is, moving in a current, which when aided, and not interrupted, will always be found positive, or having a north pole, at that end of the conductor or magnet where the fluid is escaping; and negative, or with a southern polarity, at the opposite extremity.

3. "De l'Education des Animaux; faisant suite à l'ouvrage publié en 1842, et qui a pour titre Essai sur l'Education des Animaux." Par St. Léonard de Lille, Membre de diverses Sociétés scientifiques, et de l'Athénée des Arts de Paris, et son Employé des Finances. Première partie de l'Institut et de l'Intelligence, Education et Civilisation. Communicated by J. F. Daniell, Esq., For. Sec. R.S.